

Installation Instructions

QEV Solenoid Retrofit Kit

Part #ACA85330 115 VAC

Part #ACA85331 208 VAC

Description:

The Apollo Dental Products' QEV solenoid replacement kit is designed to update the old style diaphragm actuated valves on all ADP compressors. The new QEV solenoid valve is a normally open, direct acting valve that allows the dry purge air to be redirected back through the desiccant drying chamber, pulling the moisture off the beads and preparing the compressor for the next pump-up cycle.

Instructions:

1. Confirm that the compressor is the same voltage as the replacement solenoid valve.
2. Turn "OFF" the power to the compressor at the Main Circuit Breaker Panel.
3. As illustrated in FIGURE 1 - remove the shaded components from the compressor.
4. As illustrated in FIGURE 2 - tighten the provided "Tee" assembly onto the bottom of the dryer, leaving the assembly facing away from the receiver tank.
5. As illustrated in FIGURE 3 - tighten the solenoid assembly to the "Tee" assembly and rotate the complete assembly so that it is parallel to the receiver tank.
6. As illustrated in FIGURE 4 - cut and install the new 3/8" copper tubing between the coalescing filter and the solenoid assembly. Two pieces of 3/8" tubing are provided in case a mistake is made cutting the first piece of tubing. 1/2" copper tubing and fittings are provided for triple head lubricated compressor models.
7. As illustrated in FIGURE 4 - bend-cut (Only If Necessary), and install the existing 1/4" copper tubing from the pressure switch to the solenoid assembly.
8. As illustrated in FIGURE 4 - install the new 1/4" polyflo tubing from the bottom of the coalescing filter, the 3/8" polyflo tubing from the solenoid assembly, and route both to the condensate drain bucket. Wire ties are provided to hold both tubes together.
9. Confirm again that the solenoid valve voltage is the same as the compressor voltage, and that the compressor supply voltage is off at the main circuit breaker.

NOTE: The electrical wires from the solenoid valve are only protected by the wire insulation and heat shrink tubing. Be sure not to expose any bare wiring as it will be electrically HOT.

10. Single Head Compressors Only

As illustrated in FIGURE 5 route one leg of the solenoid coil to the pressure switch. Use the provided strain relief adapter when stringing the wire through the pressure switch frame. Route the other leg of the solenoid coil to the top left side of the compressor switch that carries the white wire. NOTE: Be sure to use the provided strain reliefs when stringing the wire through the electrical box. GO TO STEP 13.

NOTE: On some older models it will be necessary to use the extra wire and fittings provided to extend the solenoid coil wires to the pressure switch and switch box.

11. Twin Head Compressors Only

As illustrated in FIGURE 6 route one leg of the solenoid coil to the pressure switch, and install the grey jumper across the pressure switch as shown. Use the provided strain relief adapter when stringing the wire through the pressure switch frame. Route the other leg of the solenoid coil to the top left side of the compressor switch. NOTE: Be sure to use the provided strain reliefs when stringing the wire through the electrical box. GO TO STEP 13.

NOTE: On some older models it will be necessary to use the extra wire and fittings provided to extend the solenoid coil wires to the pressure switch and switch box.

(Instructions Continued on Page 2)

Instructions (Continued):

12. Triple Head Compressors Only

As illustrated in FIGURE 7 - route one leg of the solenoid coil to the pressure switch. Use the provided strain relief adapter when stringing the wire through the pressure switch frame. Route the other leg of the solenoid coil to the top left side of the compressor switch. NOTE: Be sure to use the provided strain reliefs when stringing the wire through the electrical box. GO TO STEP 13.

NOTE: On some older models it will be necessary to use the extra wire and fittings provided to extend the solenoid coil wires to the pressure switch and switch box.

13. Double check that both legs from the solenoid coil are hooked-up exactly as shown in the corresponding figure.

14. Re-install the compressor switch making sure that no bare ends are close or touching the electrical box.
15. Re-install the control shroud over the switch assembly.
16. Re-install the pressure switch cover.
17. Turn each compressor switch to the "OFF" position.
18. Turn the main circuit breaker power "ON".
19. Turn each compressor switch "ON".
20. While the compressor is pumping up to 100 PSI, check to make sure that no air is coming out of the 3/8" polyflo tubing from the solenoid valve. If air is escaping from the 3/8" polyflo tubing, turn the main power at the circuit breaker "OFF" and double-check the solenoid coil voltage and the wiring illustrations.
21. Check for air leaks around each installed fitting.
22. Immediately after the compressor stops, check that air is released from the 3/8" polyflo. The air should start coming out between 80 - 95 PSI on the purge gauge.
23. Run the compressor through at least 5 cycles to insure everything is properly working.
24. Remember to check the coalescing filter element. If the differential gauge on the top of the filter turns steady red it is time to replace the element.

Warranty Information: • 90 Days

All ADP accessories are thoroughly inspected and tested in accordance with rigid specifications and standards. Our accessories are guaranteed against any defective material and workmanship from the date of shipment; provided that the installation, operation, and maintenance is done in accordance with ADP procedures as outlined in our Installation and Maintenance Guides. Warranty cards must be returned to ADP within ten days of installation to effect warranty. No other warranties or guarantees, expressed or implied are made.

ADP's obligation under the warranty is to provide parts for the repair or, at its option, to provide the replacement product (excluding labor). All special, incidental and/or consequential damages are excluded. We will not issue credit for accessories without first attempting to correct the problem in the field. Written notice of breach of warranty must be given to ADP within the warranty period. The warranty does not cover damage resulting from improper installation or maintenance, accident or misuse. The warranty does not cover damage resulting from the use of cleaning, disinfecting or sterilizing chemicals and processes. The warranty does not cover vacuum failures due to hard water deposits. Failure to follow instructions provided in ADP's Installation and Maintenance Guides may void the warranty.

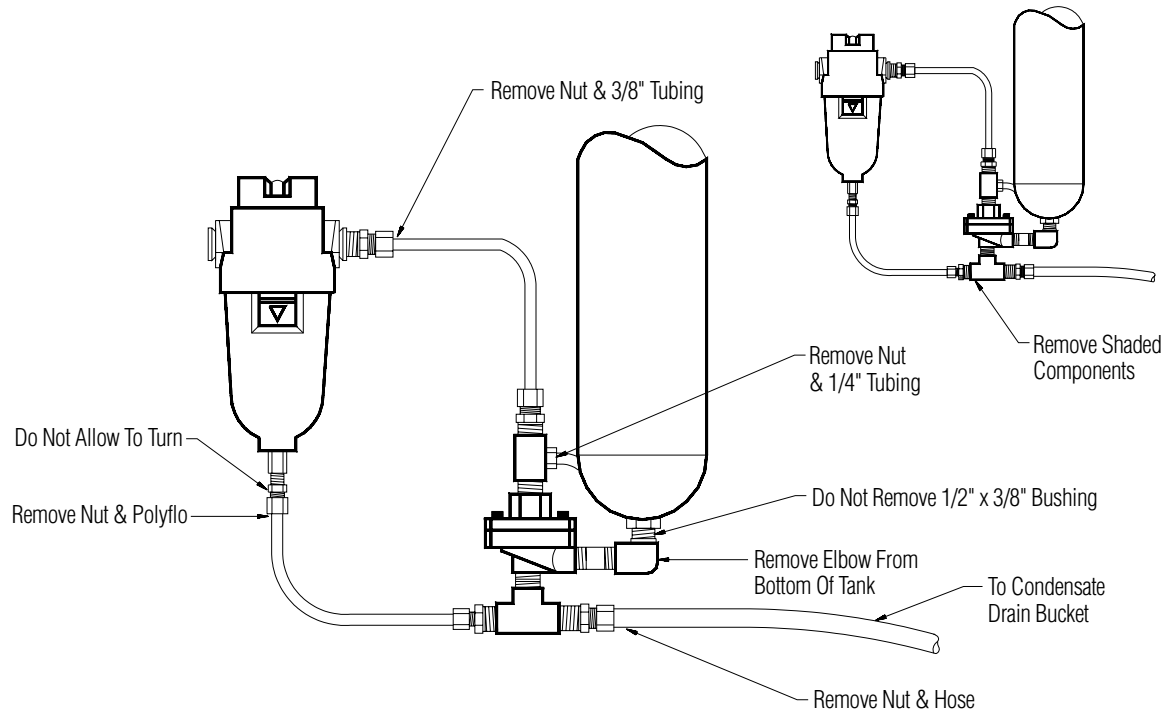


FIGURE 1

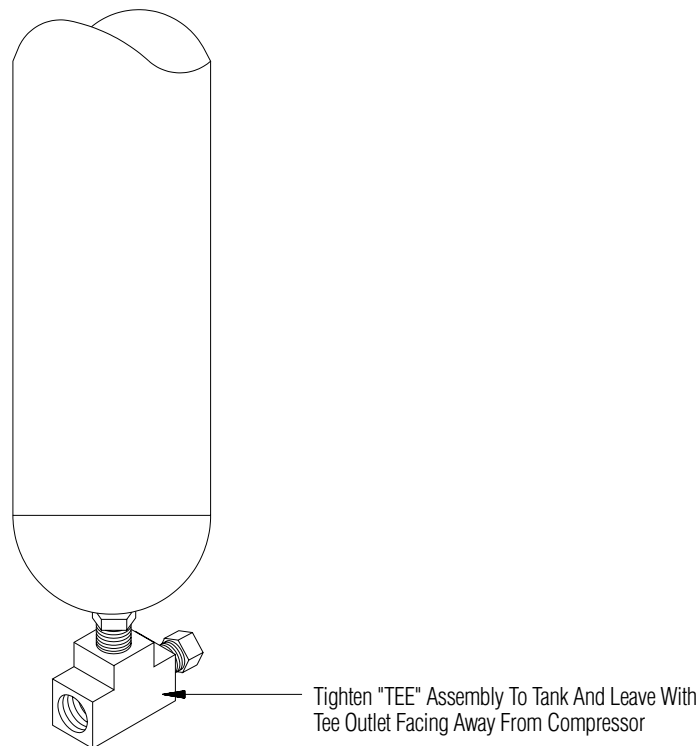
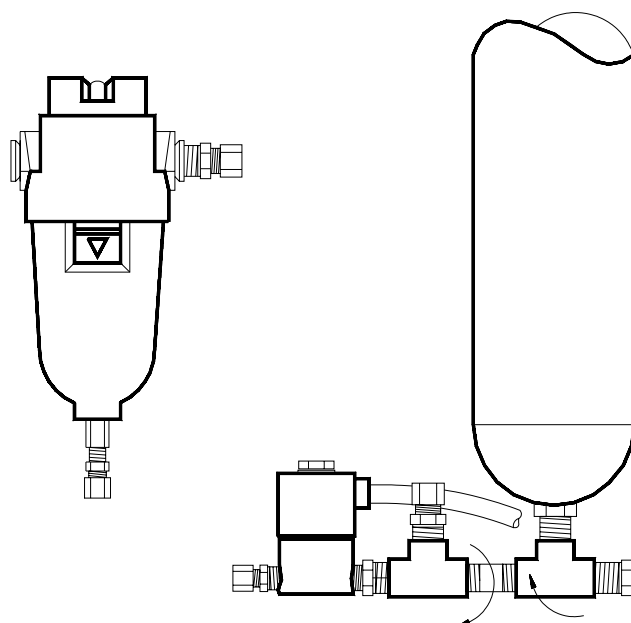


FIGURE 2



Fasten Solenoid Assembly To "TEE" Assembly AND Rotate Complete Assembly So It Is Parallel To Receiver Tank

FIGURE 3

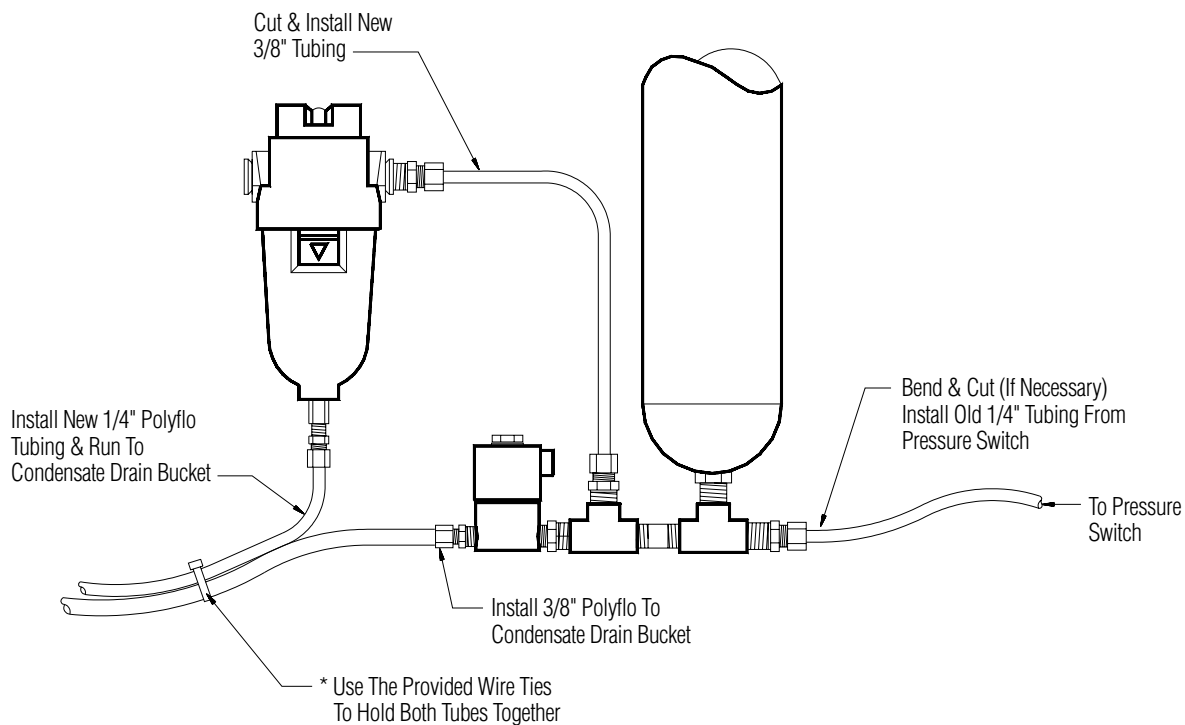


FIGURE 4

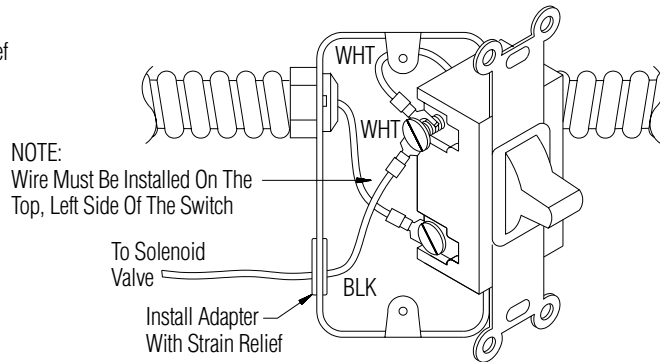
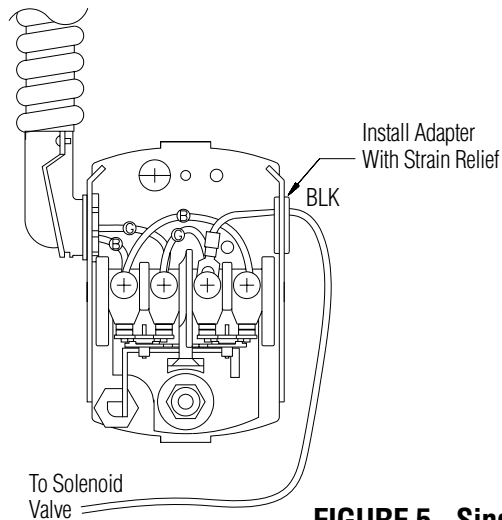


FIGURE 5 - Single Head Compressor

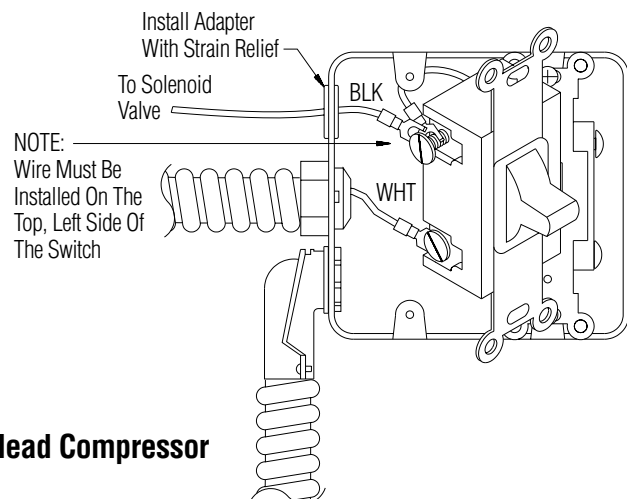
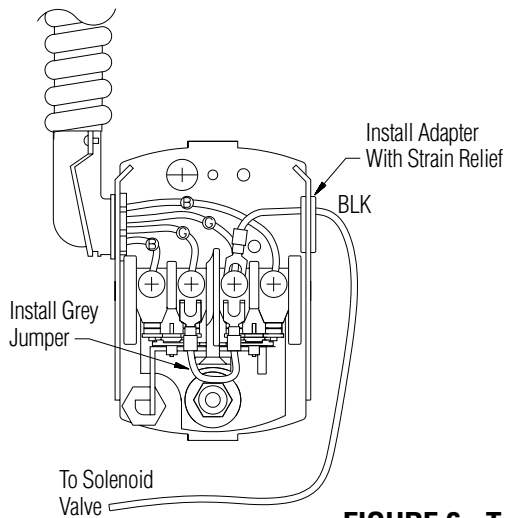


FIGURE 6 - Twin Head Compressor

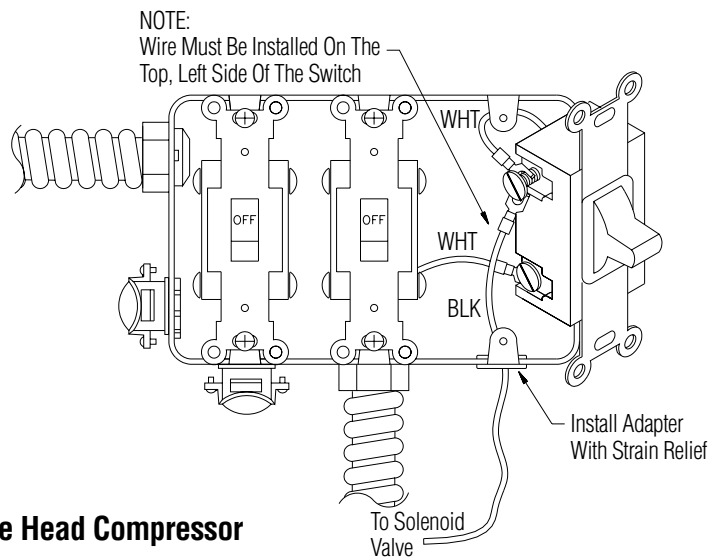
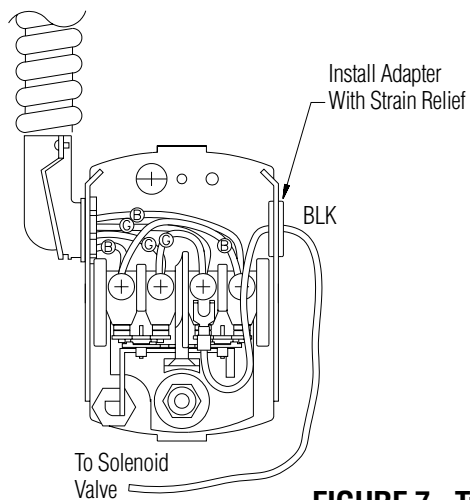


FIGURE 7 - Triple Head Compressor